REMARKS

This amendment responds to the Office Action dated November 3, 2009 in which the Examiner rejected claims 1-17 under 35 U.S.C. § 103.

As indicated above, claims 1, 4 and 5 have been amended in order to make explicit what is implicit in the claims. The amendment is unrelated to a statutory requirement for patentability.

Claim 1 claims an autonomous robot apparatus, claim 4 claims an information processing method for an autonomous robot apparatus and claim 5 claims a computer readable medium having a program for an autonomous robot apparatus. The robot apparatus communicates with a communication apparatus by radio and independently determines an action in accordance with an instruction from a user or a surrounding environment. The apparatus, method and program include measuring a quality of communication of radio signals received from the communication apparatus. The action, on the basis of the communication quality measured by the measuring means and the instruction from the user, is then determined. The action determined is then performed. When the communication quality indicates a loss of communication with the communication apparatus, the robot apparatus physically communicates the loss of radio communication to a user and requests another instruction from the user.

By measuring a quality of communication of radio signals and when the communication quality indicates a loss of communication with a communication apparatus, having the robot apparatus physically communicate the loss of radio communication to a user and request another instruction from the user, as claimed in claims 1, 4 and 5, the claimed invention provides a robot apparatus, method and program which utilizes functions peculiar to the robot so that a user can be easily notified of a state of communication. The prior art does not show, teach or suggest the invention as claimed in claims 1, 4 and 5.

Claims 1-13 were rejected under 35 U.S.C. § 103 as being unpatentable over *Glenn, et al.* (U.S. Patent No. 6,763,282) in view of GASIL (General Aviation Safety Information Leaflet, September 2002).

Glenn, et al. appears to disclose in Figure 13 a flow chart illustrating the method for controlling the actions of a robot 902. At step 1306, the control station 904 and monitoring personnel can then use information conveyed in the impulse radio signals 908 to control the actions of the robot 902. The control station 904 can use the conveyed information to control the actions of the robot 902 in order to monitor and control the environment within a building 1102. The information obtained by the robot 102 and conveyed in impulse radio signals 908 to the control station 904 can include a wide variety of information including environmental related information, safety related information, inventory related information and surveillance related information (column 24, lines 13-24).

Thus, *Glenn, et al.* merely discloses conveying information to a control station 904 and monitoring personnel. Nothing in *Glenn, et al.* shows, teaches or suggests (a) a robot apparatus physically communication loss of radio communication to a user and (b) the robot apparatus requesting another instruction from the user as claimed in claims 1, 4 and 5. Rather, *Glenn, et al.* only discloses conveying information but not conveying the loss of radio communication.

GASIL appears to disclose on page 16 reports about a loss of communication between Air Traffic Control (ATC) and aircraft (page 16, lines 1-2). Pilots, avionics engineers, FISOs and air to ground radio operators were asked to report an unexplained loss of communication to the Safety Investigation and Data Department of the CAA (by MOR form or by letter) as an occurrence in order to aid the ongoing investigations by providing much needed extra data. As no cause or combination of causes has yet been confirmed as the reason for such a loss of

communication, all information relating to the state of the aircraft at the time of such a loss of communication is very relevant (third paragraph, lines 7-9, page 16).

Thus, GASIL merely discloses human operators (pilots, engineers, etc.) of aircraft reporting the loss of communication (after landing the aircraft) by MOR form or by letter to a safety investigation and data department. Nothing in GASIL shows, teaches or suggests (a) a robot apparatus communicating loss of radio communication with a communication apparatus or (b) physically communicating the loss of radio communication to a user as claimed in claims 1 and 4-5. Rather, GASIL only discloses a human operator (not a robot) writing a report to a safety department (the safety department is not a user).

Additionally, GASIL appears to disclose on page 18, an air traffic control frequency is not a vehicle for carrying on casual conversations such as discussing the merits of a particular air show. Irrelevant chatter blocks the frequency and is not appreciated by another pilot who is trying to get a word edge ways to ATC. Save the chat for your mobile phone after you have landed (page 18, paragraph 5)!

Thus, GASIL merely discloses that the air traffic control frequency should not be used for casual conversation such as use of your mobile phone. Thus, nothing in GASIL shows, teaches or suggests when communication quality indicates a loss of radio communication, the robot apparatus requests another instruction from a user as claimed in claims 1, 4 and 5. Rather, GASIL only discloses not using the air traffic control frequency for idol chatter. In fact, if radio communication is lost in GASIL, no "idol chatter" is available and thus, no request can be made.

A combination of *Glenn, et al.* and GASIL is not possible since *Glenn, et al.* is directed to monitoring information conveyed from a robot to a control station while GASIL is directed to a pilot informing a safety department via a written report of loss of radio communication during

a flight. Applicant respectfully requests the Examiner point out with specificity (a) where the robot is in GASIL, and (b) how the pilot is to inform the control tower of loss of radio communication during flight (since the radio communication is out, the pilot can therefore not communicate with ground control). Even assuming arguendo that the references could be combined, the combination would merely suggest that once the control station loses communication with the robot as taught by *Glenn, et al.*, the monitoring personnel (not the robot) writes a letter to a safety department telling the safety department that they've lost communication with the robot as taught by GASIL. Thus, nothing in the combination of the references shows, teaches or suggests when communication quality indicates loss of radio communication, the robot apparatus physically (a) communicates the loss of radio communication to a user and (b) requests another instruction from the user as claimed in claims 1 and 4-5. Therefore, Applicant respectfully request the Examiner withdraws the rejection to claims 1 and 4-5 under 35 U.S.C. § 103.

Claims 2-3 and 6-17 recite additional features. Applicant respectfully submits that claims 2-3 and 6-17 would not have been obvious over *Glenn, et al.* and GASIL within the meaning of 35 U.S.C. § 103 at least for the reasons as set forth above. Therefore, Applicant respectfully requests the Examiner withdraws the rejection to claims 2-3 and 6-17 under 35 U.S.C. § 103.

Thus it now appears that the application is in condition for a reconsideration and allowance. Reconsideration and allowance at an early date are respectfully requested. Should the Examiner find that the application is not now in condition for allowance, Applicant respectfully requests the Examiner enters this Amendment for purposes of appeal.

CONCLUSION

If for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is requested to contact, by telephone, the Applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed within the currently set shortened statutory period, Applicant respectfully petitions for an appropriate extension of time. The fees for such extension of time may be charged to Deposit Account No. 50-0320.

In the event that any additional fees are due with this paper, please charge to our Deposit Account No. 50-0320.

Respectfully submitted,

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